(1)

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-335328
(43)Date of publication of application : 22.11.2002

(51)Int.Cl. H04M 3/00
H04M 3/493
H04M 11/00
H04M 15/00
H04M 15/16

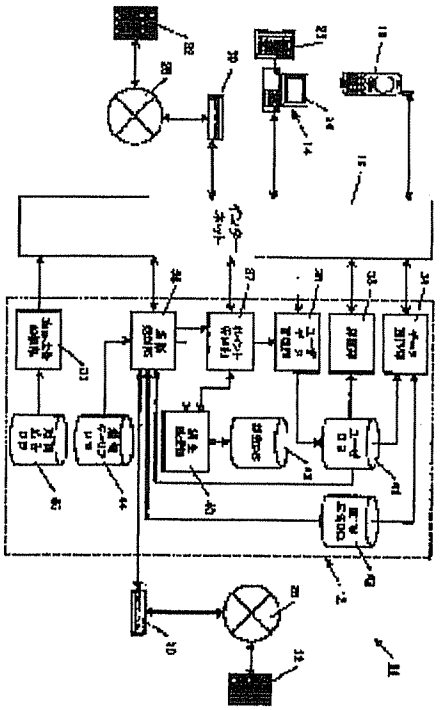
(21)Application number : 2002-037801
(22)Date of filing : 15.02.2002

(71)Applicant : SEKI MASAHIRO
(72)Inventor : SEKI MASAHIRO

(30)Priority
Priority number : 2001043121 Priority date : 20.02.2001 Priority country : JP

(54) INTERNET PHONE SUPPORT SYSTEM

(57)Abstract:
PROBLEM TO BE SOLVED: To provide an Internet phone support system by which even a general user poor in the technical knowledge can readily utilize an Internet phone.
SOLUTION: In the system 10 that is provided with a user communication terminal 14, a center server 12 connected to the terminal 14 via the Internet 16 and a plurality of gateway servers 30, the center server 12 is provided with a user database 41 that stores telephone numbers of callers in cross-reference with each user, a data shaping section 34 that extracts a required telephone number when the communication terminal 14 outputs a display request of telephone directory information and transmits the telephone number to the communication terminal 14, a database 44 that stores charge system information of each communication carrier, and a speech processing section 38 that determines a communication carrier whose speech charge is cheapest when the communication terminal 14 outputs a call request, identifies any gateway server 30 connected to a telephone line network of the communication carrier and brings the call to a telephone number of a called party.



* NOTICES *

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention]This invention relates to an Internet telephone system, and relates to the Internet telephone supporting system which can provide the user of an Internet telephone with various convenience especially.
[0002]
[Description of the Prior Art]Recently, the Internet-based phone services using VoIP (Voice over Internet Protocol) art are becoming realistic by rapid progress of Internet related art, improvement in the transmission speed accompanying maintenance of a telecom infrastructure, etc. It is the requisite to talk over the telephone at the beginning when this Internet telephone system appeared using a microphone or headphone between [linked to the Internet] personal computers. Telephone speech quality was also remarkably inferior compared with the usual telephone using a switched line.
On the other hand, these days, it sends from the telephone linked to a personal computer, and it became possible to receive a message to common telephone by connecting with a public network via the gateway server installed on the Internet, and the level with which telephone speech quality can moreover also bear use enough is reached.
[0003]If this Internet telephone is utilized, it can avoid if possible that a charged public network intervenes between an origination side and a destination side, and dramatic reduction of phonecall charges can be brought about. For example, even when telephoning the United States from Japan, phonecall charges can save the international telephone rate in which expense increases most as the charge of a local call of Japan and the U.S. charge of a local call are only imposed.
[0004]
[Problem(s) to be Solved by the Invention]Thus, since large saving of telephone charges is expectable also in the actual condition by using well and improvement in the further telephone speech quality is also expectable in connection with future technical development and infrastructure building, it can be said that the Internet telephone has a big possibility as a next-generation means of communication. For this reason, in some company users, the motion which adopts an Internet telephone system as connection between the head office and a branch office formally has begun to appear, and, as a result, sharp reduction of annual communication charges is realized.

[0005]However, there is no opportunity that the threshold of an Internet telephone is still expensive and it will be freely used like the usual telephone for a general user. As the first reason, since it is a developing means of communication, it is still possible that the service body system which a scarce general user can also use for technical knowledge easily is not fixed. Although the telephone speech quality and stability of an Internet telephone are inferior to be sure compared with a general telephone under the present circumstances, If it uses only within the specific purpose and partner, a general user also has utility value, and if added value other than saving of sufficient backup organization or phonecall charges is prepared, it can be expected that it spreads at a stretch.
[0006]This invention is thought out in order to solve the above-mentioned problem which the conventional Internet telephone system has, and an object of an invention is to provide the supporting system for carrying out as [use / freely / a scarce general user / for technical knowledge / an Internet telephone].
[0007]
[Means for Solving the Problem]This invention in order to attain the above-mentioned purpose the Internet telephone supporting system according to claim 1, An Internet telephone system provided with a center server connected with a communication terminal of users having a talking function via the Internet and two or more gateway servers connected with a telephone network of each communication carrier and the above-mentioned center server, respectively is characterized by comprising:
A telephone-directory-information memory measure which the above-mentioned center server relates with user concerned and an action addressee a telephone number of an action addressee transmitted from a user's communication terminal, and is stored.
A means to transmit information which specifies an action addressee which extracted a telephone number related with the user concerned from the above-mentioned telephone-directory-information memory measure, and was related with the telephone number concerned at least when a display requirement of telephone directory information was outputted via the Internet from the above-mentioned user's communication terminal to a user's communication terminal.
A memory measure which stored tariff structure information on each communication carrier.
When a calling request to a specific action addressee is outputted from a communication terminal of the user concerned, Apply an area pinpointed by telephone number of the action addressee concerned to the tariff structure of each communication carrier, and phonecall charges deduce a communication carrier which becomes the cheapest, A means to specify a gateway server connected with a telephone network of the communication carrier concerned, and a means to make the above-mentioned telephone number receive a message from the gateway server concerned, and to make a speech path establish between the above-mentioned user's communication terminal, and communication equipment of an action addressee.

[008]As a result, a user registers beforehand the other party who hangs an Internet telephone as telephone directory information into a system, calls this via the Internet, and only specifies an action addressee, and it becomes possible to use an Internet telephone. And in order that phonecall charges may choose most a communication carrier which becomes cheap by the system side, there is an advantage

which can reduce phonecall charges of an Internet telephone to a limit.
[0009]Written this invention is characterized by a supporting system comprising the following at claim 2.
An animation advertisement storage means which stored animation advertisement information.
A means to extract predetermined animation advertisement information from the above-mentioned animation advertisement storage means, and to transmit to a communication terminal of the user concerned when a distribution request of an animation advertisement is outputted from a user's communication terminal.
A means to relate a predetermined point with the user concerned and to store in a predetermined memory measure based on distribution of the animation advertisement information concerned.
A means to compute phonecall charges by measuring duration of call between the above-mentioned user's communication terminal, and communication equipment of a destination side, and applying this to the tariff structure of the communication carrier concerned, and a means to subtract a point corresponding to these phonecall charges from a point balance of the user concerned stored in the above-mentioned memory measure.
As a result, a user earns the point by viewing and listening to an animation advertisement, and since it becomes possible to apply this to phonecall charges, an Internet telephone can be used for free.
[0010]Written this invention is characterized by a supporting system comprising the following at claim 3.
A telephone advertisement memory measure which stores a telephone number related with a telephone advertisement.
A means to extract predetermined information about each telephone advertisement from the above-mentioned telephone advertisement memory measure, and to transmit to a communication terminal of the user concerned when a display requirement of information about a telephone advertisement is outputted by the Internet course from the above-mentioned user's communication terminal.
When a calling request to a specific telephone advertisement is outputted from a communication terminal of the user concerned, A means to specify a gateway server which applies an area pinpointed by telephone number related with the telephone advertisement concerned to the tariff structure of each communication carrier, deduces a communication carrier from which phonecall charges become the cheapest, and is connected with a telephone network of the communication carrier concerned.
A means to make the above-mentioned telephone number receive a message via the gateway server concerned, and to make a speech path establish between the above-mentioned user's communication terminal, and communication equipment of an action addressee, A means to compute phonecall charges by measuring duration of call between the above-mentioned user's communication terminal, and communication equipment of an action addressee, and applying this to the tariff structure of the communication carrier concerned, and a means to relate the phonecall-charges information concerned with an action addressee, and to store in a predetermined memory measure.
As a result, a user is using an Internet telephone and it becomes possible for advertisement information to come to hand for nothing. Since a user can be provided with advertisement information, using an Internet telephone also for a donor of

advertisement information information, it becomes possible to save phonecall charges.

[0011]

[Embodiment of the Invention]The center server 12 which drawing 1 shows the entire image of the Internet telephone supporting system 10 concerning this invention, and the employment person of this system 10 manages, Network connection of the communication terminal 14 of a large number which the user of this system 10 possesses is carried out via the Internet 16. The cellular phone 18 provided with the Internet connectivity function which each user possesses is connected to the Internet 16 via the packet exchange network 20 and the gateway server 22 of a communication carrier.

[0012]The above-mentioned center server 12 A WWW (World Wide Web) server function, It has a mail server function, a name server function, an application server function, a database server function, etc., and is constituted by carrying out network connection of two or more workstations and personal computers actually.

[0013]As the above-mentioned user's communication terminal 14, the personal computer 24 provided with the Internet connectivity function corresponds, and the telephone 26 only for Internet phone calling is connected to each personal computer 24. The user can talk over the telephone via this telephone 26 in the state where the personal computer 24 is connected to the Internet 16. Of course, it is also possible to connect a microphone, headphone, or a loudspeaker to the sound board of the personal computer 24, and to talk over the telephone via these instead of using the private telephone machine 26.

[0014]Each user can make common telephone receive a message from the above-mentioned communication terminal 14. Namely, it is the telephone network gateway server's 30 being installed for every communication carrier between the Internet 16 and the telephone network 28 in an every place region, and going via this gateway server 30 in this system 10, Arrival to the common telephone 32 connected to the telephone network 28 from the Internet 16 is realized. Thus, since the Internet 16 intervenes between a user's communication terminal 14 and the telephone 32 of an action addressee which are addressers, Even if it is a case where an action addressee is in a remote place or outside the country, phonecall charges will not generate only the charge of a local call from a user's house to the access point of ISP (Internet Service Provider), and the charge of a local call of the area in which an action addressee resides. When the telephone 32 of the destination side is installed in the neighborhood of the center server 12, A dial signal is sent out to the telephone network 28a from the direct gateway server 30a, without going via the Internet 16, and a speech path is established between a dispatch user's communication terminal 14, and the telephone 32 of a destination side.

[0015]Drawing 2 is provided with the following.

It is a block diagram showing the main functional constitution of this system 10, and the center server 12 is the data falsework 34.

Authentication section 35.

User-datum Management Department 36.

The point control department 37, the call processing part 38, the animation advertisement distribution part 39, the accounting part 40, the user databases 41, the telephone advertisement database 42, the charge database 43, the communication carrier database 44, and the animation advertisement database 45.

The above-mentioned data falsework 34, the authentication section 35, the user-datum Management Department 36, the point control department 37, the call processing part 38, the animation advertisement distribution part 39, and the accounting part 40, CPU of the computer which constitutes the center server 12 is realized by performing required processing according to OS or an exclusive program. The above-mentioned user databases 41, the telephone advertisement database 42, the charge database 43, the communication carrier database 44, and the animation advertisement database 45 are stored in the hard disk of the computer.

[0016]Those who wish use of this Internet telephone supporting system 10 need to register as a user a priori, and need to secure the record for storing self data in the user databases 41. The website of the center server 12 is accessed by Internet 16 course from the self personal computer 24, and, specifically, "new registration" is chosen from the service menu displayed on a personal computer screen. As a result, the form for new registration is transmitted from a website (graphic display abbreviation). It is registered as a new user into the user databases 41 via the user-datum Management Department 36 by inputting a self name, the password of choice, an address, a telephone number, a mail address, a portable telephone number, sex, age, etc. into the input column of this form, and transmitting to it.

[0017]Drawing 3 is what shows an example of the data item set up in the user databases 41, User ID is provided in the item of a password, a name, an address, a telephone number, a mail address, a portable telephone number, sex, age, an advertising reading history, an accumulation point, a call history, telephone book data, etc. by first in a roll. It cannot be overemphasized that these data items can be fluctuated if needed.

[0018]Hereafter, the concrete utilizing method of this Internet telephone supporting system 10 is explained based on the flow chart of drawing 4 - drawing 6. First, in order for a registered user to enjoy service of this supporting system 10, the website of the center server 12 is accessed by Internet 16 course from the self personal computer 24, and it asks for login in this service. From the center server 12 which received this, the form which asks for the input of (S10 of drawing 4), user ID, and a password is transmitted (S11). On the other hand, a user enters self ID and password and transmits. In the center server 12 which received this, it is judged whether the password stored in the user databases 41 in (S12) and the authentication section 35 and the transmitted password are in agreement (S13).

[0019]The authentication section's 30 attestation of the justification of the user concerned will transmit Web page 46 shown in drawing 7 from the website of the center server 12 to a user's personal computer 24 (S15). The viewing window 47 which this Web page 46 is a dedicated page for receiving the Internet toll-free call service, and imitated the display of the cellular phone, The input button 48 which imitated the ten key of the cellular phone, the "user telephone directory" column 49, and the "toll-free call advertising" column 50 are displayed.

[0020]Each user of this system 10 receives distribution of an animation advertisement from the system 10 side a priori, gains a fixed point by perusing this, and has become a mechanism in which the part corresponding to that point balance can be talked over the telephone for free. For example, when the user who resides in Japan hangs an international call on the family who resides in the United States, the point balance (here 123 points) displayed on the above-mentioned viewing window is checked. If sufficient point remains here, the input button 48 is

clicked as it is, the telephone number of a destination side will be inputted, connection buttons will be clicked, and a call request will be transmitted.
[0021]In the center server 12 which received this, the point balance of the user concerned recorded by (S16) and the call processing part 38 in the user databases 41 is checked (S17). Here, if it is presumed that the point balance of the user concerned is less than a set point (for example, five points) (S18), this telephone call will be refused for reasons of the shortage of a point balance (S19). On the other hand, if a certain thing is checked as for more than a set point, the point balance of the user concerned, Collation with the telephone number of the destination side inputted by the call processing part 38 from the user's personal computer 24 and the data in the communication carrier database 44 is performed, and the gateway server 30 which it should take charge of is specified (S20).
[0022]Namely, in the communication carrier database 44. The tariff structure data the time zone exception for every communication carrier and according to area is stored, By applying the inhabitable area and current time of an action addressee which were deduced from the code according to country contained in the telephone number of the destination side transmitted by the user, or the area code to the above-mentioned tariff structure, a communication carrier with the cheapest phonecall charges is specified at present. As a result, ID of the gateway server 30 connected to the telephone network of the communication carrier concerned in the inhabitable area of an action addressee is specified automatically.
[0023]The call processing part 38 transmits the telephone number data of an action addressee to the gateway server 30 specified here, and orders it call origination. The gateway server 30 which received this outputs the telephone number data concerned to the switchboard of the telephone network 28, and the speech path between the telephone 32 of a destination side and a dispatch user's communication terminal 14 is made to establish (S21). Henceforth, the call processing part 38 supervises the telephone call situation between a dispatch user's communication terminal 14, and the destination-side telephone 32, applies duration of call to the tariff structure of the communication carrier concerned, and integrates phonecall charges (S22 of drawing 5). The computed result of these phonecall charges is outputted to the point control department 37 one by one.
[0024]In the point control department 37, subtraction treatment of the point corresponding to phonecall charges is performed with reference to the table where the correspondence relation between phonecall charges and a point was described (S23). The result of this subtraction treatment is reflected in the accumulation point item in the user databases 41 via the user-datum Management Department 36. If the value of an accumulation point item decreases, the data falsework 34 will detect this and will transmit a point balance to a user's communication terminal 14 (S24). As a result, on a user's personal computer screen, a subtraction indication of the residual point size will be given with duration of call.
[0025]When a telephone call is completed before a residual point size is attached in a bottom, it is satisfactory, but (S25). Although the point has run short, when the telephone call is continuing, it is transmitted to a dispatch user's personal computer 24 by (S26) and the call processing part 38 (S27), and the warning message "a telephone call is cut in after about 1 minute" is displayed on a screen.
Although the telephone call should usually be closed spontaneously here (S28), when a telephone call continues as it is and a point balance becomes zero, a speech path

is compulsorily cut by the call processing part 38 (S29).
[0026]In order for a user to accumulate a new point in preparation for a next telephone call, distribution of animation advertisement information is received from the center server 12, and viewing and listening to this is called for. That is, a user clicks the button 51 "stores the point" on Web page 46 of drawing 7, and outputs the distribution request of animation advertisement information. In the center server 12 which received this, the animation advertisement information stored in the animation advertisement database 45 is extracted one by one by (S30 of drawing 6), and the animation advertisement distribution part 39, and is transmitted to a user's personal computer 24 by Internet 16 course (S31).
[0027]As shown in drawing 8, the moving-image-reproduction window 52 rises, and reproduction of an animation and a sound is started at the same time the moving-image-reproduction program for exclusive use is beforehand installed in a user's personal computer 24 and it receives animation advertisement information (S32). A user views and listens to this animation advertisement on a personal computer screen. Since the "check" button 53 will be displayed for several seconds all over an animation generation window if just before one animation advertisement is completed comes (S33), a user clicks this at once. The selection operation of the "check" button 53 by this user is outputted to the center server 12 by Internet 16 course. The point control department 37 which detected this relates with the user concerned the point beforehand set up about (S34) and the animation advertisement concerned, and stores it in the user databases 41 (S35).
[0028]The accounting part 40 starts simultaneously, and after the amount information corresponding to the point concerned is related with an advertisement provider (an advertising agency or an advertiser), it is registered into the charge database 43 (S36). Later, an advertisement provider will be asked for the bill which added the predetermined system fee to a part for the amount of money recorded in the charge database 43.
[0029]The user can view and listen to many animation advertisements continuously, and since the animation advertisement distribution part 39 continues distributing two or more animation advertisements according to a predetermined program until it receives the demand of the stop from a user (S37), he can store up the point intensively. And the user can hang an Internet telephone again in the stage in which a certain amount of point was stored up. If between telephone calls continues viewing and listening to an animation advertisement, summing processing can be performed in parallel to the subtraction treatment of a point, a long time can be covered, and a telephone call can be enjoyed.
[0030]If it was above, the user explained the example which inputs the telephone number of a destination side by clicking the ten key-like button 48, but this system 10 is provided with a user individual's telephone directory function, and can send it by one click about a registered telephone number. That is, on Web page 46, the "user telephone directory" column 49 is formed as mentioned above, and the telephone number for every action addressee is displayed in a list.The user itself inputs an action-addressee name and a telephone number from the keyboard of the personal computer 24, and this telephone book data is registered into the user databases 41 via the user-datum Management Department 36, and is extracted and transmitted by the data falsework 34 at the time of Web page 46 transmission.
[0031]If a mouse pointer is set and clicked to the action-addressee name which a

user is listing, the calling request to the action addressee concerned will be outputted. In the center server 12 which received this, specification of the gateway server 30 is made by the call processing part 38 based on the telephone number related with the action addressee concerned, and instructions of call origination are outputted to the gateway server 30 concerned. As a result, the speech path between the telephone 32 of an action addressee and a user's communication terminal 14 is established via the gateway server 30.

[0032]When a user newly registers telephone book data, the button 54 on Web page 46 "into which a telephone directory is edited" is clicked, and telephone directory edit form is called. From the center server 12 which received this, the edit form which is not illustrated is transmitted and it is displayed on a user's personal computer screen. A user inputs the names (a name, an abbreviation, etc.) of the partner point, and a telephone number, clicks "registration" button, and transmits input data here. In the center server 12 which received this, input data is registered by the user-datum Management Department 36 into the user databases 41.

[0033]Also when changing the telephone number of an action addressee or deleting the data itself, edit form is called on a personal computer screen in the same procedure as the above, and after performing required editing work, it transmits to the center server 12. Renewal registration of this editing data is carried out into the user databases 41 via the user-datum Management Department 36.

[0034]When it has the existing telephone book data which the user inputted using other address book programs, shelf registration of telephone book data can also be performed using this. In this case, a user transmits to the center server 12, after transforming the existing telephone book data into general-purpose file formats, such as CSV. In the center server 12 which received this, after a conversion process required for the telephone book data transmitted at the user-datum Management Department 36 is performed, it is registered into the user databases 41.

[0035]Thus, by giving each user's telephone directory function on Web page 46 for the Internet toll-free call service provisions, It is expectable that become possible [a user] to telephone the desired partner point by one click, the frequency where the convenience, therefore Internet telephone are used increases, and the viewership of an animation advertisement increases by extension.

[0036]Once the user accumulates the telephone number of the partner point into the user databases 41 through Web page 46, it will become possible to use telephone book data from the cellular phone 18 which carries an Internet connectivity function from a place where one has gone, for example, the I mode of NTT DoCoMo, etc., (registered trademark).

[0037]That is, if a user accesses the website only for an I mode of this system 10 using the Internet connectivity function of the cellular phone 18 and clears the authentication step by the authentication section 35, a service menu will be displayed on the display of the cellular phone 18 (graphic display abbreviation). If "use of MY telephone directory" is chosen from this inside, the data falsework 34 will extract the telephone book data of the user concerned from the user databases 41, The telephone book data optimized to cellular phones is transmitted to a user's cellular phone 18 by Internet 16 -> gateway server 22 -> packet exchange network 20 course. As a result, as shown in drawing 9, telephone book data (character string related with the telephone number of a destination side) is displayed in a list on the display 55 by the browser program carried in the

cellular phone 18.

[0038]If a user chooses the arbitrary partner points, for example, "** house", and pushes a determination button here, with the auto-dial function (Phone To function) carried in the cellular phone 18, call origination to the telephone number related with "** house" is realized, and the telephone call from the cellular phone 18 can be performed. Although the telephone call in this case is not an Internet telephone, therefore the user has to pay the usual cellular phone charge, the telephone book data registered into Internet telephones can be used effectively also as a telephone directory of a cellular phone, and there is an advantage which can omit the duplication input of telephone book data.

[0039]In this system, it also has the further free telephone advertisement function. Hereafter, the procedure of this telephone advertisement function is explained according to the flow chart of drawing 10. That is, the company name extracted from the telephone advertisement database 42 by the data falsework 34, or a trade name and a service name are displayed in a list on the "toll-free call advertising" column 50 of above-mentioned Web page 46. The telephone number of the company which provides the telephone advertisement concerned is related with the company name, or the trade name and service name which were displayed here.

[0040]A user's click of one in this will output the listening demand of the telephone advertisement concerned to the center server 12. In the center server 12 which received this, the gateway server 30 of charge is specified in the same procedure as the above by the telephone number of relevance being read by (S40) and the call processing part 38, and making this compare with the data of the communication carrier database 44 by them (S41). Next, the call processing part 38 orders the gateway server 30 concerned the call origination to the above-mentioned telephone number, and makes a speech path establish between a user's personal computer 24, and the telephone 32 of a telephone advertisement offer company and communication equipment (S42). As a result, the user can hear the advertisement information about interested company, goods, and service via an Internet telephone.

[0041]Addition processing of phonecall charges based on duration of call is performed by the call processing part 38 in the meantime (S43), When the telephone call about this advertisement information is completed, after the fee according to duration of call was outputted to the accounting part 40 from (S44) and the call processing part 38 and relating with the donor of the advertisement information concerned, it is stored in the charge database 43 (S45). Later, the bill about the above-mentioned phonecall charges and the charge of advertisement distribution will be published to the advertisement information donor concerned. Although passing automatically the sound usually recorded beforehand as telephone advertisement information corresponds, naturally the person in charge of a company is able to perform description of item etc. in the flesh. As a result, toll-free dial use is attained for a company.

[0042]In the above, when a user views and listened to an animation advertisement, the point was stored up, and the business model on which an Internet telephone is hung by applying this to phonecall charges for nothing was illustrated, but this invention is not limited to this. For example, phonecall charges and the prescribed fee which were computed by the call processing part 38 are stored in the charge database 43 or the user databases 41 via the accounting part 40, and it can also apply so that a bill may be published later and it may ask for payment. Of course,

the point system by viewing and listening of an animation advertisement and the fee collection system of phonecall charges can also be made to use together. That is, when a free telephone call is performed by applying this when there is a point balance, and a bottom is attached the case where the point is insufficient, and in the middle of a telephone call, flexible employment is attained by changing to a charging system. When the user concerned gains the point by viewing and listening of an animation advertisement once imposing phonecall charges for reasons of a point piece, naturally employment of making phonecall charges reduce by applying the point concerned is also possible.

[0043]The Internet telephone supporting system 10 concerning this invention can also be used effectively as a customer gathering tool of a website which a company manages. That is, each company has planned enclosure of the existing user or a potential user by portal-site-izing the website of its company now. In order to have this its company website utilized as each user's portal site, offer of attractive contents is more important than anything, and offer of various information, a fortune-telling corner, installation of an electronic bulletin board, etc. are carried out, but. It is a difficult situation that these contents attain differentiation with the other company now which became general. On the other hand, it becomes possible to build a novel website by providing "the free Internet-based phone services by application of the point accumulated by animation advertising viewing and listening" and a "telephone directory management service" above-mentioned in the website of its company.

[0044]Drawing 11 shows an example of the Web page in the website of such a company, and the moving-image-reproduction window 57 other than the dialler 56 for Internet telephones or the user telephone directory column 49 is formed. The advertising display column 58 about goods or service or the information selection column 59 of the company concerned is also installed.

[0045]Drawing 12 is provided with the following.

It is a block diagram showing the example of functional constitution for realizing such service, and the center server 12 is the data falsework 34.

Authentication section 35.

User-datum Management Department 36.

The point control department 37, the call processing part 38, the animation advertisement distribution part 39, the accounting part 40, the user databases 41, the business information database 60, the charge database 43, the communication carrier database 44, and the animation advertisement database 45.

The above-mentioned data falsework 34, the authentication section 35, the user-datum Management Department 36, the point control department 37, the call processing part 38, the animation advertisement distribution part 39, and the accounting part 40, CPU of the computer which constitutes the center server 12 is realized by performing required processing according to OS or an exclusive program. The above-mentioned user databases 41, the business information database 60, the charge database 43, the communication carrier database 44, and the animation advertisement database 45 are stored in the hard disk of the computer.

[0046]Those who wish use of this Internet telephone supporting system 10 need to register as a user to the specific company which is an operator of the center server 12, and need to secure the record for storing self data in the user databases 41. The website of the company concerned is accessed by Internet 16

course from the self personal computer 24, and, specifically, "new registration" is chosen from the service menu displayed on a personal computer screen. As a result, the form for new registration is transmitted from a website (graphic display abbreviation). By inputting a self name, ID of choice, a password of choice, a birthday, sex, marriage (married/unmarried exception), utilizing environment (exception of a house, a school, and a company), an occupational description, an interested field, a zip code, etc. into the input column of this form, and transmitting to it, It is registered as a new user into the user databases 41 via the user-datum Management Department 36.

[0047]In the above-mentioned business information database 60, the advertisement information and contents information of the company concerned are stored. In the animation advertisement database, the animation advertisement information about the company concerned and other companies is stored.

[0048]A registered user accesses the website of the company concerned by Internet 16 course from the self personal computer 24, and asks for login in this service. From the center server 12 which received this, the form which asks for the input of user ID and a password is transmitted (graphic display abbreviation). On the other hand, a user enters self ID and password and transmits. In the center server 12 which received this, it is judged whether the password stored in the user databases 41 in the authentication section 35 and the transmitted password are in agreement.

[0049]The authentication section's 30 attestation of the justification of the user concerned will transmit Web page 61 shown in drawing 11 from the data falsework of the center server 12 to a user's personal computer 24. Under the present circumstances, the data falsework 34 generates Web page 61 only for the user concerned by referring to a user's information recorded in the user databases 41. For example, optimizing the goods listed in the advertising display column 58 according to the age and sex of the user concerned and the combination of service, or optimizing the kind of information listed to the information selection column 59 according to the interested field of the user concerned etc. corresponds. Of course, the residual point size of the user concerned is displayed on the viewing window 47 of the dialler 56, and the mail arrival place which the user concerned itself registered is displayed on the user telephone directory column 49.

[0050]Here, when sufficient point for a user is left behind, a call request is transmitted by clicking the input button 48 as it is, or choosing one mail arrival place from the lists of user telephone directory columns 49. In the center server 12 which received this, the point balance of the user concerned recorded by the call processing part 38 in the user databases 41 is checked. In more than a fixed point, the point balance of the user concerned here in a certain case. Collation with the telephone number of the destination side inputted by the call processing part 38 from the user's personal computer 24 or the telephone number related with the mail arrival place which the user chose, and the data in the communication carrier database 44 is performed, and the gateway server 30 which it should take charge of is specified. Next, the call processing part 38 transmits the telephone number data of an action addressee to the gateway server 30 specified here, and orders it call origination. The gateway server 30 which received this outputs the telephone number data concerned to the switchboard of the telephone network 28, and makes the speech path between the telephone 32 of a destination side, and a dispatch user's communication terminal 14 establish. Henceforth, the call

processing part 38 supervises the telephone call situation between a dispatch user's communication terminal 14, and the destination-side telephone 32, applies duration of call to the tariff structure of the communication carrier concerned, and integrates phonecall charges. The computed result of these phonecall charges is outputted to the point control department 37 one by one. In the point control department 37, subtraction treatment of the point corresponding to phonecall charges is performed with reference to the table where the correspondence relation between phonecall charges and a point was described. The result of this subtraction treatment is reflected in the accumulation point item in the user databases 41 via the user-datum Management Department 36. If the value of an accumulation point item decreases, the data falsework 34 will detect this and will transmit a point balance to a user's communication terminal 14. As a result, on a user's personal computer screen, a subtraction indication of the residual point size is given with duration of call. The user can enjoy a free telephone call between mail arrival places until a point balance becomes zero.

[0051]When a point balance becomes small, a user clicks the button 51 "stores the point" in order to prepare for a next telephone call, and outputs the distribution request of animation advertisement information. In the center server 12 which received this, the animation advertisement information stored in the animation advertisement database 45 is extracted one by one by the animation advertisement distribution part 39, and is transmitted to a user's personal computer 24 by Internet 16 course. Under the present circumstances, the animation advertisement distribution part policy 39 can also distribute preferentially the optimal animation advertisement information for the user concerned by referring to a user's information, including attribution information, utilization history information, etc., recorded in the user databases 41.

[0052]As for the above result, reproduction of an animation and a sound is started in the moving-image-reproduction window 57 in Web page 61. A user views and listens to this animation advertisement on a personal computer screen, clicks the "check" button 53 and performs declaration of intention listened [view and]. The point control department 37 which received this relates with the user concerned the point set up about the animation advertisement concerned, and stores it in the user databases 41.

[0053]Since the animation advertisement distribution part 39 continues distributing two or more animation advertisements according to a predetermined program until it receives the demand of the stop from a user, the user can store up the point by viewing and listening to many animation advertisements continuously intensively. Of course, if between telephone calls continues viewing and listening to an animation advertisement, summing processing will be performed in parallel to the subtraction treatment of a point, and the telephone call of it covering a long time will be attained.

[0054]The animation advertisement reproduced is not limited to a company's own thing which is sponsoring the website concerned, and can also reproduce the animation advertisement of other companies. In this case, the accounting part 40 starts, and after the pointed amount information gained when a user views and listened to the animation advertisement concerned is related with an advertisement provider (an advertising agency or an advertiser), it is registered into the charge database 43. Later, the bill which added the predetermined system fee to a part for

the amount of money recorded in the charge database 43 will be published by the advertisement provider.

[0055]The user can gain the point decided beforehand, when goods and service are purchased through Web page 61 concerned also besides viewing and listening to an animation advertisement or it participates in a specific event. For example, if a user opens the menu in Web page 61, arrives at a merchandise purchase page and orders a specific article there, point grant instructions will be outputted to the user-datum Management Department 36 from the point control department 37, and the point in the user databases 41 will be increased.

[0056]

[Effect of the Invention]According to the Internet telephone supporting system according to claim 1, each user registers beforehand the other party who hangs an Internet telephone as telephone directory information into the system, It becomes possible only by calling this via the Internet and specifying an action addressee to hang an Internet telephone simply. And in order that phonecall charges may choose most the communication carrier which becomes cheap automatically by the system side, there is an advantage which can reduce to a limit the phonecall charges of the Internet telephone which is applied from the first only as for the charge of a local call.

[0057]According to the Internet telephone supporting system according to claim 2, each user earns the point by viewing and listening to an animation advertisement, it becomes possible to apply this to phonecall charges, and there is an advantage which can use an Internet telephone for free.

[0058]According to the Internet telephone supporting system according to claim 3, a user becomes possible [that telephone advertisement information comes to hand by using an Internet telephone for nothing]. Since a user can be provided with a telephone advertisement, using an Internet telephone also for the donor of advertisement information, phonecall charges can be saved.

[Translation done.]

* NOTICES *

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

CLAIMS

[Claim(s)]
[Claim 1]An Internet telephone system provided with a center server connected with a communication terminal of users having a talking function characterized by comprising the following via the Internet, and two or more gateway servers connected with a telephone network of each communication carrier, and the above-mentioned center server, respectively.
A telephone-directory-information memory measure which the above-mentioned center server relates with user concerned and an action addressee a telephone number of an action addressee transmitted from a user's communication terminal, and is stored.
A means to transmit information which specifies an action addressee which extracted a telephone number related with the user concerned from the above-mentioned telephone-directory-information memory measure, and was related with the telephone number concerned at least from the above-mentioned user's communication terminal when a display requirement of telephone directory information was outputted via the Internet to a user's communication terminal.
A memory measure which stored tariff structure information on each communication carrier.
When a calling request to a specific action addressee is outputted from a communication terminal of the user concerned, Apply an area pinpointed by telephone number of the action addressee concerned to the tariff structure of each communication carrier, and phonecall charges deduce a communication carrier which becomes the cheapest, A means to specify a gateway server connected with a telephone network of the communication carrier concerned, and a means to make the above-mentioned telephone number receive a message from the gateway server concerned, and to make a speech path establish between the above-mentioned user's communication terminal, and communication equipment of an action addressee.

[Claim 2]The Internet telephone supporting system comprising according to claim 1:
An animation advertisement storage means which stored animation advertisement information.
A means to extract predetermined animation advertisement information from the above-mentioned animation advertisement storage means, and to transmit to a communication terminal of the user concerned when a distribution request of an animation advertisement is outputted from a user's communication terminal.

A means to relate a predetermined point with the user concerned and to store in a predetermined memory measure based on distribution of the animation advertisement information concerned.
A means to compute phonecall charges by measuring duration of call between the above-mentioned user's communication terminal, and communication equipment of a destination side, and applying this to the tariff structure of the communication carrier concerned, and a means to subtract a point corresponding to these phonecall charges from a point balance of the user concerned stored in the above-mentioned memory measure.

[Claim 3]The Internet telephone supporting system comprising according to claim 1 or 2:
A telephone advertisement memory measure which stores a telephone number related with a telephone advertisement.
A means to extract predetermined information about each telephone advertisement from the above-mentioned telephone advertisement memory measure, and to transmit to a communication terminal of the user concerned from the above-mentioned user's communication terminal when a display requirement of information about a telephone advertisement is outputted by the Internet course.
When a calling request to a specific telephone advertisement is outputted from a communication terminal of the user concerned, A means to specify a gateway server which applies an area pinpointed by telephone number related with the telephone advertisement concerned to the tariff structure of each communication carrier, deduces a communication carrier from which phonecall charges become the cheapest, and is connected with a telephone network of the communication carrier concerned.
A means to make the above-mentioned telephone number receive a message via the gateway server concerned, and to make a speech path establish between the above-mentioned user's communication terminal, and communication equipment of an action addressee, A means to compute phonecall charges by measuring duration of call between the above-mentioned user's communication terminal, and communication equipment of an action addressee, and applying this to the tariff structure of the communication carrier concerned, and a means to relate the phonecall-charges information concerned with an action addressee, and to store in a predetermined memory measure.

[Translation done.]

* NOTICES *

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

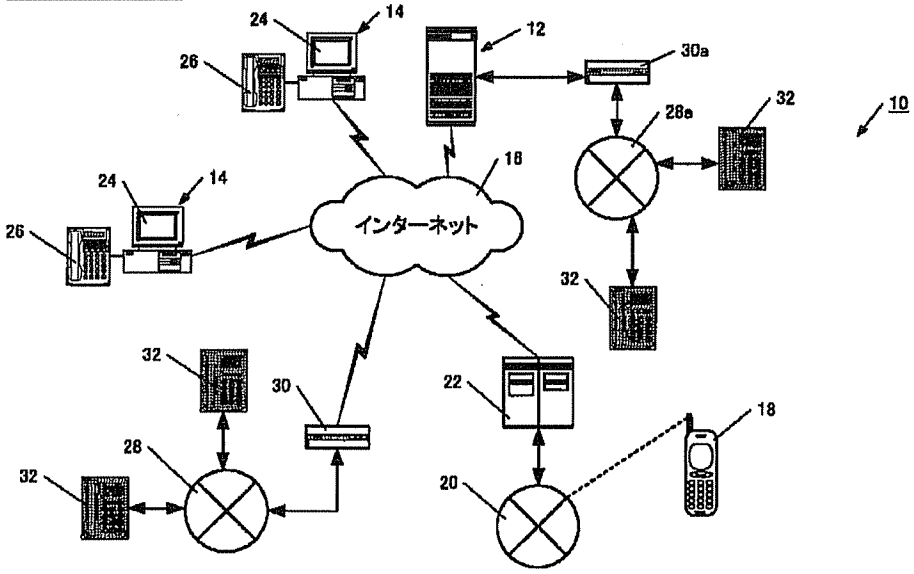
DRAWINGS

[Drawing 3]

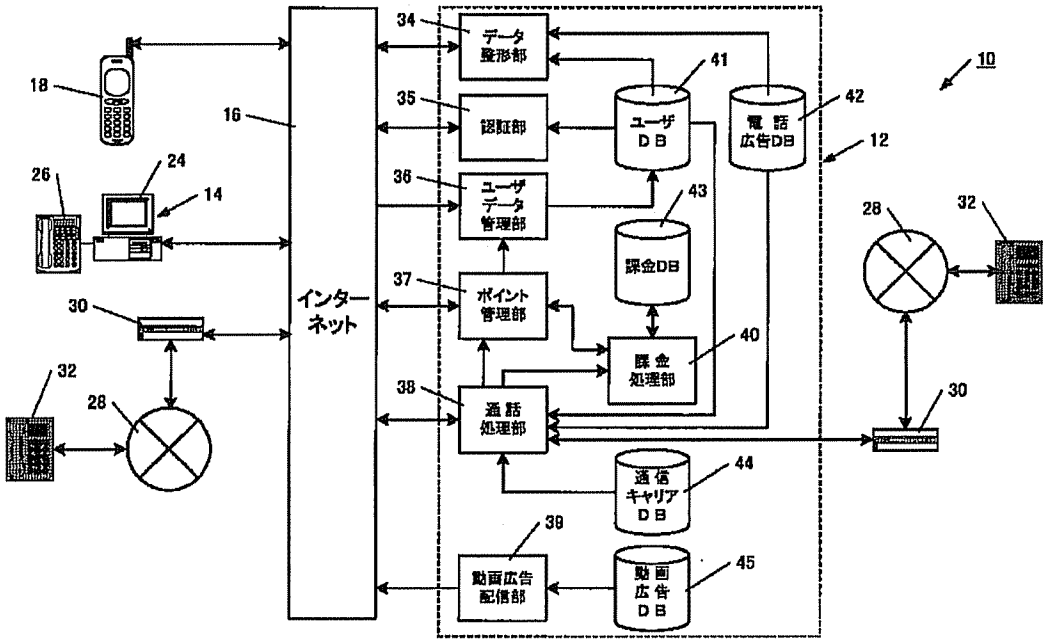
[ユーザDB]

ユーザID
パスワード
氏名
住所
電話番号
メールアドレス
携帯電話番号
性別
年齢
広告閲覧履歴
蓄積ポイント
通話履歴
電話帳データ

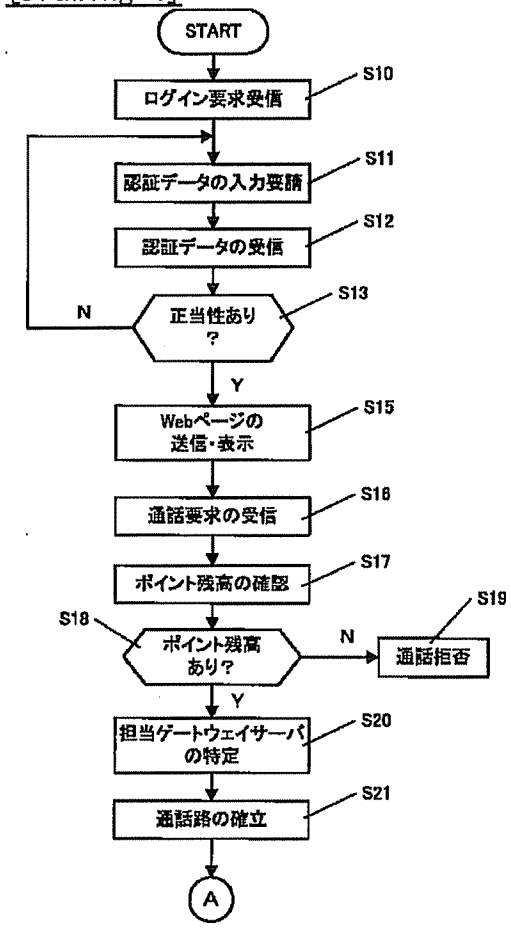
[Drawing 1]



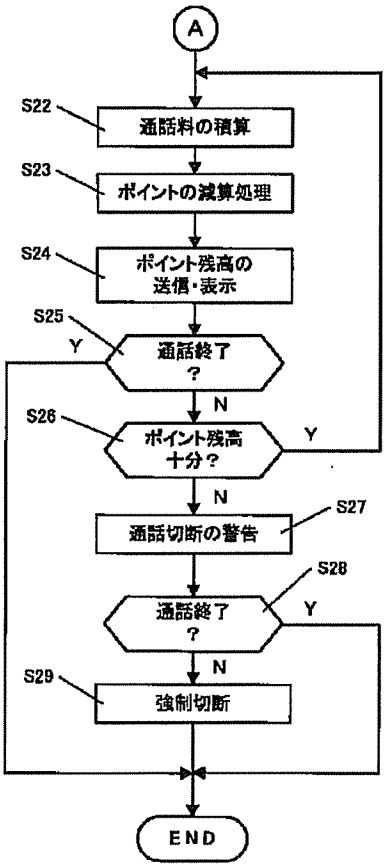
[Drawing 2]



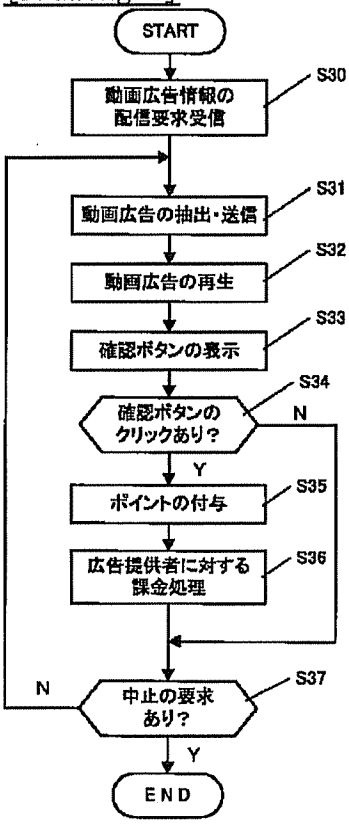
[Drawing 4]



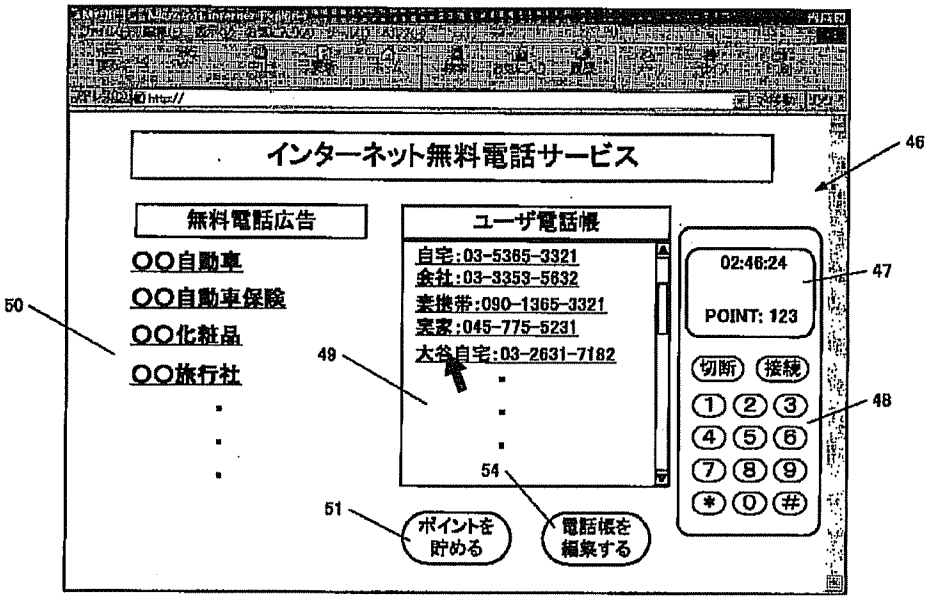
[Drawing 5]



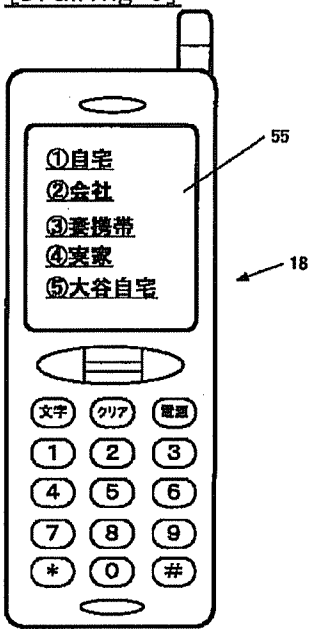
[Drawing 6]



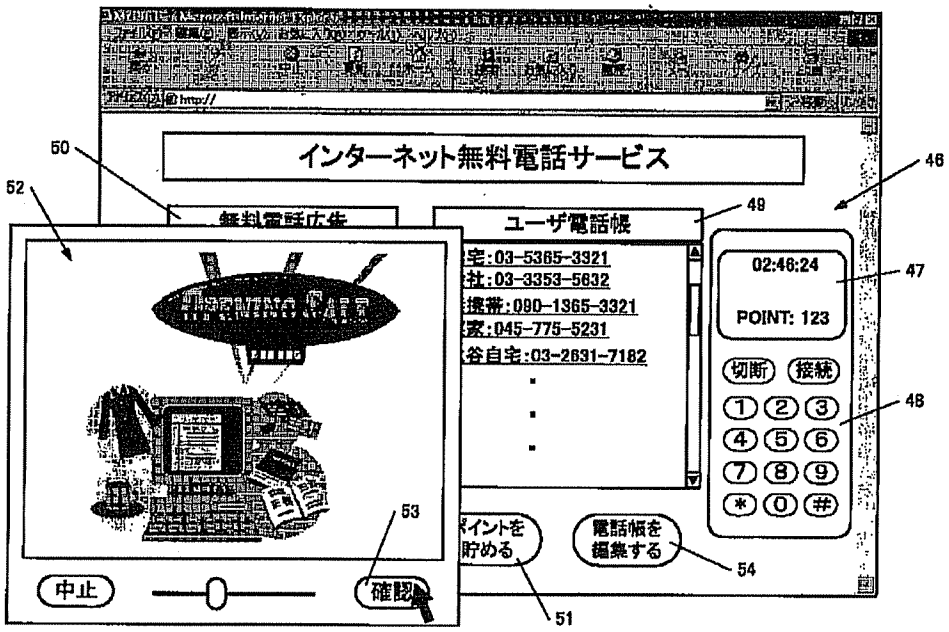
[Drawing 7]



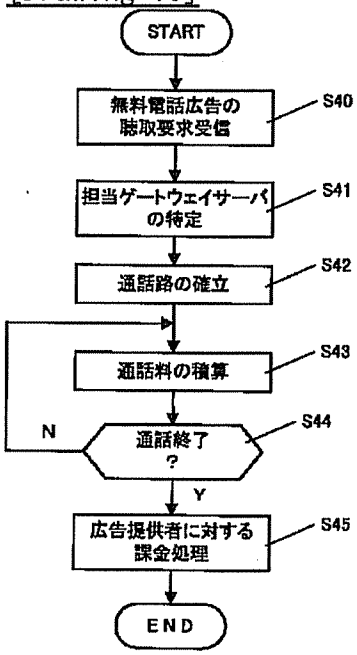
[Drawing 9]



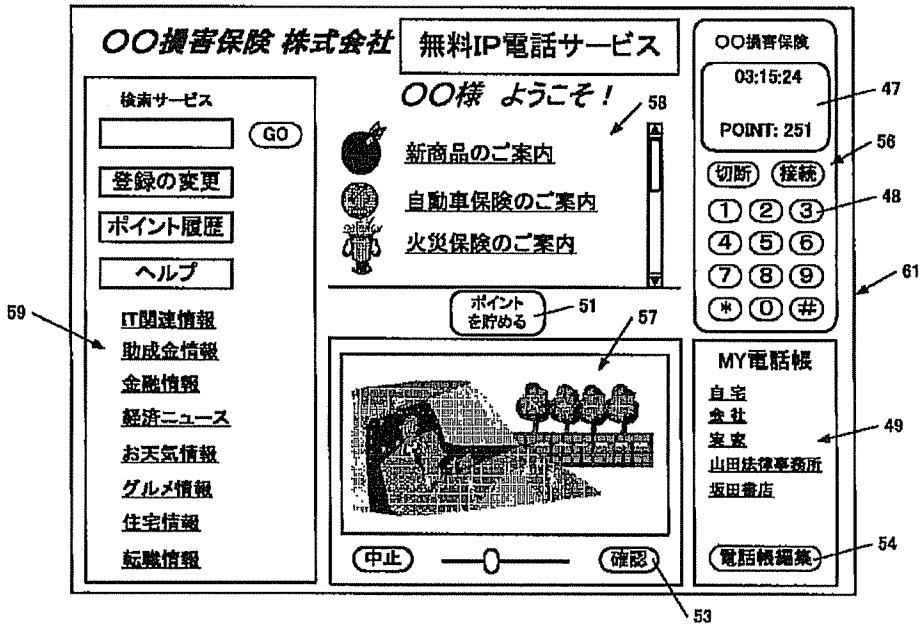
[Drawing 8]



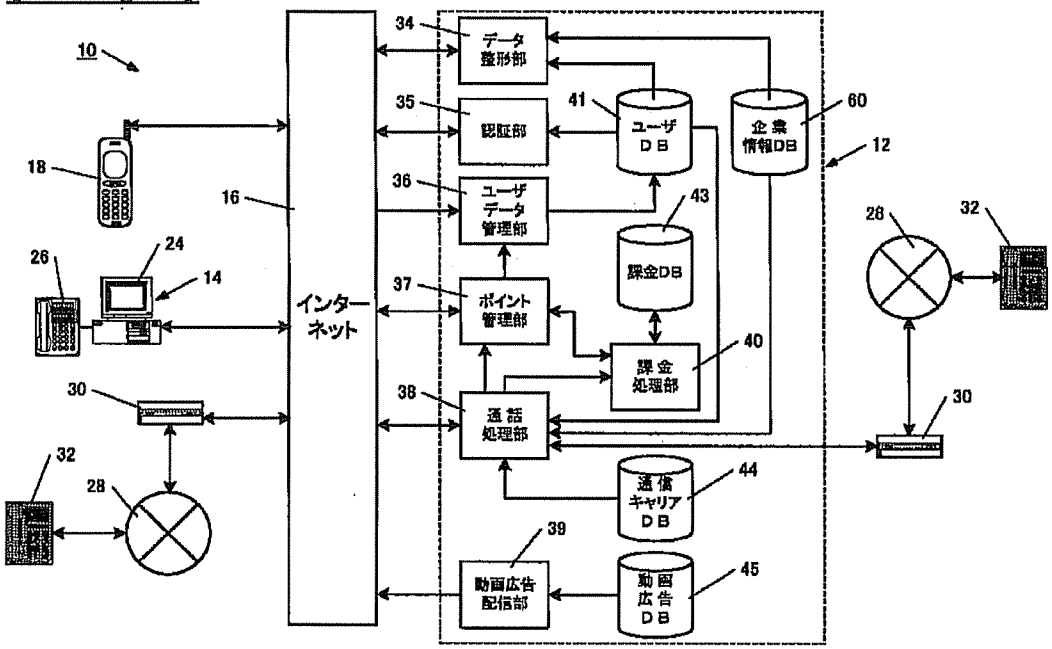
[Drawing 10]



[Drawing 11]



[Drawing 12]



[Translation done.]